

**UNIVERSITI TEKNOLOGI MARA**

**THE EFFECT OF TINTED LENSES ON  
MOBILITY CONTROL**

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requirements for the**

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## AUTHOR'S DECLARATION

I declare that the work in this proposal is considerably my own, and to the extent that any part of this work is not my own, I have indicate that it is not mine by fully acknowledgement in accordance with the standard referring practices of the discipline.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, University Teknologi Mara (UiTM) regulating the conduct of my study and research.

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## ABSTRACT

**Background:** The use of tinted lens started to become more widespread and not just for fashion accessory or improvement of appearance but to reduce eyestrain in bright light condition. There are many reasons behind the use of sunglass. Nowadays, people are aware of the danger of ultraviolet (UV) light which may cause harm to the eyes. The use of sunglass can reduce the amount of UV light enter the eyes and in addition become act as protection from dust, or other hazard. To date, in Malaysia, the sunglass prescription is not following the standard requirement for ideal sunglass. **Aim:** The objective of this paper is to identify the effect of parameter, MC I, MC II, MC III and MC IV in mobility control towards four different percentages, 0%, 25%, 50%, and 75% tinted lens intensity and to compare mobility control in vehicle maneuver control with from previous study. **Method:** In this study, the vehicle maneuver is used to predict the mobility control under different level of light transmission. The light transmission is manipulate by the used of four different percentage of tinted lens. **Result:** The effect of tinted lens is found that there is no statistically significant on MC I,  $F(3, 60) = 0.928$ ,  $p = 0.433$ , MC II,  $F(3, 51) = 0.386$ ,  $p = 0.763$ , MC III,  $F(3, 54) = 0.112$ ,  $p = 0.953$ , MC IV speed control when approach traffic light  $F(3, 54) = 1.861$ ,  $p = 0.147$ , and MC IV control on straight road regarding steering control and (x,y) position  $F(3, 57) = 0.090$ ,  $p = 0.965$ . **Conclusion:** Thus, the use of sunglass is safe on day time driving as propose by the result of current study.

Keywords: Mobility Control, Tinted Lenses.

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